

**37th Annual Meeting, APS Division of Plasma Physics
6-10 November 1995, Louisville, KY
Abstract Submittal Form**

Deadline: Friday, 7 July 1995

Subject Classification Category 4.6

[] Theory [x] Experiment

(Refer to the DPP Subject Category list on page M12.)

UCRL-JC-121609 Abs

Drive symmetry measurements in gas-filled hohlraums*, S. G. Glendinning, L. V. Powers, O. L. Landen, B. A. Hammel, R. A. Kauffman, L. J. Suter, A. L. Richard, G. Stone. We have measured the time and energy dependence of the x-ray emission patterns in hohlraums filled with gases which provide plasma densities equivalent to those expected to be encountered in an ignition scale hohlraum at peak drive. We observed early time differences between our measurements and LASNEX simulations; the differences are similar to those observed in implosion symmetry measurements in gas-filled hohlraums. These differences appear to be due to interactions between the laser and the plasma near the hohlraum laser entrance hole, and are significantly reduced by using a laser beam smoothed with a random phase plate.

*This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under contract No. W-7405-ENG-48.

- [] Prefer Poster Session
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Submitted by:

(Signature of APS Member)

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A faxed copy is not acceptable. This form, or a computer generated form, plus **TWO COPIES**, must be received by **Friday, 7 July, 1995** at the following address:

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